REMARKS

Claims 1, and 5-10 are in the application. Claims 2-4 and 11 have been canceled. Claims 1 and 5-10 are rejected. By the present amendment, claims 1, 5 and 10 are amended and new claims 12-14 are added. The amendments and new claims add no new matter.

In view of the amendments and following remarks, reconsideration of claims 1 and 5-10 and consideration of new claims 12-14 are respectfully requested.

Formalities

Claim 10 has been amended to correct the spelling of "sulfonylamido". Applicant thanks the Examiner for bringing the typographical error in claim 10 to his attention.

Applicant confirms that applicant's previous attorney elected the species "sulfonylamido derivatives of histamine" during the telephonic interview on January 8, 2003.

§ 103 Rejections

Claims 1, and 5-10 are rejected under 35 USC § 103 (a) as being unpatentable over the combined teachings of Tozer et al., Bioorganic & Medicinal Chemistry Letters 9 (1999) 3103-3108 (1999) (hereinafter "Tozer et al."), EP 680960 and Medline abstract 1999441621.

Although Tozer et al. teach a number of compounds that are sulfonamide derivatives of histamine, Tozer et al. do not teach or suggest a method for treating aging disorders by first assessing or identifying those specific forms of carbonic anhydrase that are present at reduced levels in a subject, and then administering to the subject a compound, such as a sulfonylamido derivative, that increases levels of such forms of carbonic anhydrase in the blood or brain cells of the subject, as recited in claim 1 as amended.

Neither EP 680960 nor Medline abstract 199944162 provide the teachings or suggestions that are absent from Tozer et al. Although EP 680960 states that the compounds disclosed in the published application "are usable as ....a cerebral metabolism activator aiming at treating Alzheimer's disease'', this application does not teach or suggest that such compounds should be used to increase levels of certain forms of carbonic anhydrase in the blood or brain cells of such

Alzheimer patients. More importantly, EP 680960 does not even hint at a method which involves first identifying which forms of carbonic anhydrase are reduced in the blood or brain cells of the patient and then administering a compound that induces production of such forms of carbonic anhydrase, as recited in claim 1 as amended.

Medline abstract 199944162 simply states that "Possible roles of histamine H3 receptors on neurobehavioral disorders such as Alzheimer's disease.....were also described"; and Histamine H3 receptor antagonists....may provide clinical candidates for treatment of dementia....." Neither of these statements suggest a method which involves first identifying which forms of carbonic anhydrase are reduced in the blood or brain cells of the patient and then administering the compound which induces production of such forms of carbonic anhydrase, as recited in claim 1 as amended.

None of the references cited by the Patent Office suggest that it is important to determine which one or more carbonic anhydrase enzymes are present at reduced levels prior to administering compounds that induce production of such enzymes to the patient. Thus, even if one were to combine the teachings and suggestions of Tozer et al., EP680980 and Medline abstract 199944162, one still would not have arrive at all of the steps recited in claim 1 as amended. Accordingly, the combination of Tozer et al., EP680980 and Medline abstract 199944162 does not render claim 1 obvious. Claims 5-10 depend from amended claim 1 and are, for the same reasons, not obvious.

In view of the amendments and remarks, Applicants submit that claims 1, 5-10 and 12-14 s are now in condition for allowance. Prompt notification of such allowance is respectfully requested.

Respectfully submitted,

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